

AMENDMENT TO THE CLAIMS

1-23. **(Cancelled)**

24. **(Original)** A particle comprising a base having a shape of an inverted truncated right circular cone, wherein diameter of the inverted truncated right circular cone ranges from 1 nm to 100 microns, height of the inverted truncated right circular cone ranges from 5 nm to 1000 microns, and aspect ratio of the inverted truncated right circular cone ranges from 5 to 5000.

25. **(Original)** A particle according to claim 24, wherein the diameter ranges from 10 nm to 10 microns.

26. **(Original)** A particle according to claim 25, wherein the diameter ranges from 100 nm to 1 micron.

27. **(Currently Amended)** A particle according to claim 26, wherein height of the inverted truncated right circular cone ranges from 50 nm to 1000 microns.

28. **(Currently Amended)** A particle according to claim 27, wherein height of the inverted truncated right circular cone ranges from 5 nm to 1000 microns.

29. **(Original)** A particle according to claim 24, additionally comprising an at least partly semispherical head disposed atop the base.

30. **(Original)** A particle according to claim 24, additionally comprising a layered internal structure.

31. **(Original)** A particle according to claim 24, wherein said base is at least partly hollow.

32. **(Original)** A particle according to claim 24, comprising a material capable of forming one of a planar array, a two-dimensional lattice, or a nanotube.

33. **(Original)** A particle according to claim 32, wherein said material comprises carbon, hexagonal BN; B_xC_y , where x and y are independently 0, 1, 2, 3 or 4; $B_xC_yN_z$ where x, y and z are independently 0, 1, 2, 3 or 4; a dichalcogenide; a metal oxide; a metal boride; or a combination thereof.

34. **(Previously Presented)** A particle according to claim 33, further comprising carbon.

35.-41. **(Cancelled)**

42. **(Original)** A particle according to claim 34, comprising MoS₂, WS₂, V₂O₅, MoO₃, MgB₂ or a combination thereof.